

formed, respectively, of two wire-clamping jaws, whereof one is the head of a screw and a nut engaging the said screw and molded into the case or shell.

5 3. In a telephone-receiver, the combination with the vulcanized shell or case provided with binding-posts formed, respectively, of two wire-clamping jaws, whereof one is the head of a screw: of nuts engaging the jaw-
10 forming screws and molded into the case or shell and ribbed externally, substantially as and for the purpose set forth.

4. In a telephone-receiver, the combination with the case or shell having an enlarged end
15 forming the bobbin-receiving chamber, and having two binding-posts at its opposite end, and two wires leading inwardly from the different binding-posts, respectively, and the bobbin within the said chamber; of two wire-cou-
20 ling devices arranged at opposite sides, respectively, of the bobbin and electrically connected with the different aforesaid wires, respectively, and also electrically connected with opposite terminals, respectively, of the
25 bobbin.

5. In a telephone-receiver, the combination with the case or shell enlarged at one end to form the bobbin-receiving chamber, and hav-
ing two binding-posts at its opposite end; 30 two wires leading inwardly from the different binding-posts, respectively; a disk supported within the inner end of the aforesaid chamber, and the bobbin fixed to the disk at the latter's outer side, said bobbin having the
35 terminal-forming ends of its wire extending inwardly through the disk: of two wire-coupling devices supported at opposite sides, respectively, of the bobbin and electrically con-
40 nected with the different terminals, respectively, of the bobbin, and electrically connected, also, with the different binding-posts, respectively.

6. In a telephone-receiver, the combination with the case or shell enlarged at one end to
45 form the bobbin-receiving chamber, and having an internal annular shoulder at the inner end of the said chamber, a disk within the inner end of the said chamber, the bobbin supported from the disk at the latter's outer
50 side, and having its terminal wire ends extending through the disk, and the two binding-post connecting-wires extending into the aforesaid shell or case a suitable distance; of
55 two wire-coupling devices supported from the aforesaid shoulder at opposite sides, respectively, of the bobbin, and electrically connected to the different terminals, respectively, of the bobbin, which coupling devices are electrically connected, also, with the differ-
60 ent binding-posts, respectively.

7. In a telephone-receiver, the combination of the case or shell enlarged at one end to form the bobbin-receiving chamber, a metallic disk supported within and transversely of

the inner end of the said chamber; an insu- 65
lating-disk at the inner side of the first-men-
tioned disk; a bobbin fixed to the said disk
at the latter's outer side and having its ter-
minal-forming wire ends extending through 70
comparatively large holes formed in the me-
tallic disk and through comparatively small
holes formed in the insulating-disk; the two
binding-posts; two wires electrically con-
nected with the different posts, respectively,
and extending into suitable proximity to the 75
inner side of the insulating-disk, and wire-
coupling devices supported from the shell or
case, which coupling devices are electrically
connected, respectively, to the different ter-
minals of the bobbin and electrically con- 80
nected, also, with the different binding-posts,
respectively.

8. In a telephone-receiver, the combination with the case or shell enlarged at one end to form the bobbin-receiving chamber; a disk 85
within the said chamber and bobbin sup-
ported from the said disk and having the ter-
minal-forming ends of its wires extending in-
wardly through the disk; the binding-posts,
and the wires extending into the instrument 90
from the different posts, respectively; of two
wire-coupling devices supported at opposite
sides, respectively, of the bobbin and having
arms electrically connected to the different
terminals, respectively, of the bobbin, and 95
other arms electrically connected with the
different binding-posts, respectively.

9. In a telephone-receiver, the combination with each terminal wire end of the bobbin,
and the binding-post-connecting wire elec- 100
trically connected with the said terminal; of
a wire-coupling device interposed between the
said wires and having an inwardly-extending
arm electrically connected with the binding-
post-connecting wire, and having an out- 105
wardly-extending arm provided with a groove
or channel engaged by the aforesaid bobbin-
terminal.

10. A telephone-receiver having a vulcanite case or shell provided with an externally- 110
screw-threaded band or ring molded into the
outer side of the earpiece-receiving end of
the case or shell, substantially as shown, for
the purpose specified.

11. A telephone-receiver having a vulcanite 115
case or shell provided with an externally-
screw-threaded metal band or ring O molded
into the outer side of the earpiece-receiving
end of the case or shell, and having the pro-
jections O' embedded in the case or shell, sub- 120
stantially as and for the purpose set forth.

Signed by me at Cleveland, Ohio, this 17th
day of December, 1898.

JOSEPH A. WILLIAMS.

Witnesses:

C. H. DORER,

A. H. PARROTT.